

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) A method of screening to identify target binding molecules that bind to an amino acid sequence, the method comprising:

administering to a mammal a nucleic acid encoding a fusion protein and expressing the fusion protein in the mammal, wherein the fusion protein contains a first amino acid sequence and a second amino acid sequence, and wherein the second amino acid sequence contains a first member of a specific binding pair;

removing from the mammal a biological sample that contains the fusion protein;

binding a second member of the specific binding pair to the fusion protein via the first member of the specific binding pair;

contacting the first amino acid sequence with a collection of candidate target binding molecules; and

identifying one or more target binding molecules from the collection of candidate target binding molecules that bind to the first amino acid sequence.

2. (Original) The method of claim 1, wherein the first member of the specific binding pair is an Fc domain of an immunoglobulin.

3. (Original) The method of claim 1, wherein the biological sample is serum.

4. (Original) The method of claim 1, wherein the biological sample is tissue lysate.

5. (Original) The method of claim 1, wherein the second member of the specific binding pair is an antibody.

6. (Original) The method of claim 5, wherein the antibody is a monoclonal antibody.

7. (Withdrawn) The method of claim 1, wherein the target binding molecule is a protein.

8. (Original) The method of claim 1, wherein the target binding molecule is an antibody.

9. (Original) The method of claim 8, wherein the antibody is prepared in an animal by immunizing the animal with a nucleic acid construct encoding the fusion protein.

10. (Original) The method of claim 1, further comprising administering a protease inhibitor to the mammal before removing the biological sample from the mammal.

11. (Original) The method of claim 2, wherein the target binding molecule is an antibody.

12. (Original) The method of claim 11, wherein the antibody is prepared in an animal by immunizing the animal with a nucleic acid construct encoding the fusion protein.

13. (Withdrawn) The method of claim 1, wherein the target binding molecule is a nucleic acid.

14. (Withdrawn) The method of claim 2, wherein the target binding molecule is a nucleic acid.

15. (Withdrawn) The method of claim 1, wherein the target binding molecule is a small molecule.

16. (Withdrawn) The method of claim 2, wherein the target binding molecule is a small molecule.

17. (Previously Presented) The method of claim 1, further comprising immobilizing the fusion protein after binding a second member of the specific binding pair to the fusion protein and before contacting the first amino acid sequence with a collection of candidate target binding molecules.

18. (Previously Presented) The method of claim 2, further comprising immobilizing the fusion protein after binding a second member of the specific binding pair to the fusion protein and before contacting the first amino acid sequence with a collection of candidate target binding molecules.

19. (Original) The method of claim 1, wherein the first member of the specific binding pair is a peptide of at least five amino acids in length.

20. (Previously Presented) A method of preparing a purified protein, the method comprising:

administering to a mammal a nucleic acid encoding a fusion protein and expressing the fusion protein in the mammal, wherein the fusion protein contains a first amino acid sequence and a second amino acid sequence, and wherein the second amino acid sequence contains a first member of a specific binding pair;

removing from the mammal a biological sample that contains the fusion protein;

binding a second member of the specific binding pair to the fusion protein via the first member of the specific binding pair;

removing components of the biological sample that are not bound to the second member of the specific binding pair; and  
cleaving the first amino acid sequence from the second amino acid sequence.

21. (Canceled)

22. (Original) The method of claim 20, wherein the first member of the specific binding pair is an Fc domain of an immunoglobulin.

23. (Original) The method of claim 20, wherein the biological sample is serum.

24. (Original) The method of claim 20, wherein the biological sample is tissue lysate.

25. (Original) The method of claim 20, wherein the second member of the specific binding pair is an antibody.

26. (Original) The method of claim 25, wherein the antibody is a monoclonal antibody.

27. (Original) The method of claim 22, wherein the second member of the specific binding pair is an antibody.

28. (Original) The method of claim 27, wherein the antibody is a monoclonal antibody.

29. (Previously Presented) The method of claim 20, further comprising immobilizing the fusion protein after binding a second member of the specific binding pair to the fusion protein and before removing components of the biological sample that are not bound to the second member of the specific binding pair.

30. (Canceled)

31. (Previously Presented) The method of claim 22, further comprising immobilizing the fusion protein after binding a second member of the specific binding pair to the fusion protein and before removing components of the biological sample that are not bound to the second member of the specific binding pair.

32. (Original) The method of claim 20, wherein the first member of the specific binding pair is a peptide of at least five amino acids in length.